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Appl. No. 10/658,823
Amdt. dated November 27, 2006
Reply to Office Action of July 25, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

- 1 1.-35. (Canceled)
- 1 36. (Previously Presented) A method of identifying an inhibitor of a
2 glycosyltransferase that transfers a monosaccharide from a sugar nucleotide to an acceptor
3 substrate, the method comprising
4 contacting the glycosyltransferase, an acceptor substrate, and a donor substrate
5 with a hydrophobic, non-carbohydrate test compound that inhibits interaction of a sugar with
6 hydrophobic amino acids in the active site of the glycosyltransferase and
7 determining the degree to which the activity of the glycosyltransferase is inhibited
8 in the presence of the test compound.
- 1 37. (Previously Presented) The method of claim 36, wherein the activity of
2 the glycosyltransferase is determined using an antibody that is specifically immunoreactive with
3 a product of the reaction catalyzed by the glycosyltransferase.
- 1 38. (Previously Presented) The method of claim 37, which is an ELISA
2 format.
- 1 39. (Previously Presented) The method of claim 36, wherein the
2 glycosyltransferase is expressed in a recombinant cell.
- 1 40. (Previously Presented) The method of claim 36, wherein the donor
2 substrate or acceptor substrate is labeled.
- 1 41. (Withdrawn) The method of claim 40, wherein the label is a radioactive
2 label.

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1 42. (Withdrawn) The method of claim 41, which is a radioactive column
2 assay.

1 43. (Previously Presented) The method of claim 40, wherein the label is a
2 fluorescent label.

1 44. (Previously Presented) The method of claim 36, wherein the
2 glycosyltransferase is a fucosyltransferase.

1 45. (Withdrawn) The method claim 36, wherein the glycosyltransferase is a
2 sialyltransferase.

1 46. (Withdrawn) The method claim 36, wherein the glycosyltransferase is an
2 *N*-acetylglucosaminyltransferase.

1 47. (Canceled) The method of claim 36, wherein the compound comprises an
2 aromatic or aliphatic ring structure.

1 48. (Withdrawn) The method of claim 36, wherein the compound comprises
2 an aryl moiety.

1 49. (Previously Presented) The method claim 36, wherein the compound
2 comprises a heteroaryl moiety.

1 50. (Previously Amended) The method of claim 49, wherein the heteroaryl
2 moiety is selected from the group consisting of a thiophene, pyridine, isoxazole, phthalimide,
3 pyrazole, indole, quinoline, phenothiazine, carbazole, benzopyranone, and a furan group.

1 51. (New) The method of claim 36, wherein the hydrophobic, non-
2 carbohydrate test compound comprises a member selected from the group consisting of a
3 heteroaryl moiety having from 5 to 16 ring members wherein from 1 to 3 ring members are each
4 independently selected from the group consisting of N, O and S wherein the heteroaryl ring

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- 5 structure is optionally substituted, and an aliphatic ring structure having from 3 to 7 ring
6 members and is optionally substituted.